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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,887	01/29/2001	Rolf Hesch	2289/207-70 D	1253

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WERNER H. STEMER
P.O. Box 2480
Hollywood, FL 33022

EXAMINER
GOFF II, JOHN L

ART UNIT	PAPER NUMBER
1733	4

DATE MAILED: 10/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/771,887	HESCH, ROLF	
	Examiner	Art Unit	
	John L. Goff	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) *8-10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species I-A, (appears to read on claims 1-7), drawn to a process for producing a composite element wherein the thin sectioned wall part is bonded to the foamed element while in the mold during foaming.

Species I-B, (appears to read on claims 8-10), drawn to a process for producing a composite element wherein the thin sectioned wall part is adhesively bonded to the foamed element by laminating after foaming.

2. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

3. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

4. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

5. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. During a telephone conversation with Mr. Mark Weichselbaum on 9/26/02 a provisional election was made with traverse to prosecute the invention of I-A, claims 1-7. Affirmation of this election must be made by applicant in replying to this Office action. Claims 8-10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Specification

8. The disclosure is objected to because of the following informalities: On page 1, line 7 after "filed September 10, 1998," insert - - now U.S. Patent 6,207,244 - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. In claim 1, the phrase "after a set time delay a foaming of the binder occurring for encapsulating the reinforcing elements on all sides" is confusing. It is suggested to change "after a set time delay a foaming of the binder occurring for encapsulating the reinforcing elements on all sides" to - - after a set time delay a foaming of the binder occurs to encapsulate the reinforcing elements on all sides - -. This issue should be clarified and reworded as appropriate.

Claim Rejections - 35 USC § 102/103

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rutsch et al. (U.S. Patent 4,298,556).

Rutsch et al. are directed to a method of molding fiber reinforced foam composites for use as auto-body parts, seats, helmets, luggage, etc. (Column 1, lines 8-11). Rutsch et al. teach an open mold containing an ABS foil (thin-section wall part) and a fiberglass reinforcement (reinforcing elements) (Figure 1 and Column 3, lines 1-4). Rutsch et al. teach a method comprising filling the mold with a reactive foam mixture (foaming agent), closing the mold, and foaming the mixture to encapsulate the fiberglass (Figures 1-3 and Column 1, lines 12-22 and Column 3, lines 1-10 and Column 4, lines 8-25). It is noted Rutsch et al. do not specifically recite a set time delay. However, a set time delay is inherent in reactive foam mixtures to ensure foaming does not begin until after the open mold is filled with reactive foam mixture, i.e. the reactive foam mixture is distributed within the mold, and closed. Thus, Rutsch et al. anticipate claims 1 and 2. In the alternative, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rutsch et al. to use a reactive foam mixture with a set time delay to ensure foaming does not begin prior to filling or closing the mold to ensure the mixture is distributed within the mold.

Claim Rejections - 35 USC § 103

15. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rutsch et al. as applied above in paragraph 14, and further in view of Preston.

Rutsch et al. teach all of the limitations in claim 3 as applied above except for a teaching on a set time delay of less than five seconds. Preston is directed to a method for manufacturing

RIM composites. Preston teaches an open mold containing a vinyl skin layer (thin-section wall part) and a glass mat (reinforcing elements) (Column 1, lines 29-31 and Column 4, lines 13-18). Preston teaches a method comprising closing the mold, filling the mold with a polyurethane foam mixture (foaming agent), and foaming the mixture to penetrate and encapsulate the glass fibers (Figures 2 and 3 and Column 4, lines 20-27 and 32-35). Preston further teaches that the time for filling the mold is less than five seconds (Column 3, lines 28-34). One of ordinary skill in the art at the time the invention was made reading Rutsch et al. in view of Preston would have readily appreciated using in Rutsch et al. a foam mixture with a time delay of five seconds or less to ensure foaming does not begin prior to completely distributing the mixture within the mold.

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rutsch et al. as applied in above in paragraph 14, and further in view of Miyake et al. (U.S. Patent 5,354,397).

Rutsch et al. teach all of the limitations in claim 4 as applied above except for a teaching on priming the ABS foil (thin-section wall part) prior to applying the foam mixture. However, it is well known in the art to prime a substrate such as an ABS foil on the foam application side to improve adhesion between the substrate and foam as shown by Miyake et al. One of ordinary skill in the art at the time the invention was made reading Rutsch et al. in view of Miyake et al. would have readily appreciated incorporating into the method taught by Rutsch et al. a priming step as suggested by Miyake et al. to improve adhesion between the foil and the foam.

Miyake et al. are directed to a molding comprising a soft touch layer and a foamed molding resin (Column 2, lines 54-59 and Column 7, lines 49-53 and Column 8, lines 4-7). Miyake et al. teach priming the soft touch layer to enhance adhesion (Column 7, lines 45-48).

17. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutsch et al. as applied in above in paragraph 14, and further in view of the admitted prior art (Specification pages 1-2).

Rutsch et al. teach all of the limitations in claims 5 and 6 as applied above except for a teaching on providing the ABS foil (thin-section wall part) with an insulating layer (hard shell) and transverse cross pieces. However, it is known in the art to use insulating layers and transverse cross pieces as shown by the admitted prior art. The admitted prior art is directed to known structural composite elements. The admitted prior art teaches that transverse cross pieces are known as a means for side impact protection and insulating layers are known for heat insulation (Specification pages 1 and 2).

Regarding claim 5, one of ordinary skill in the art at the time the invention was made reading Rutsch et al. in view of the admitted prior art would have readily appreciated incorporating into the method taught by Rutsch et al. an ABS foil with an insulating layer (hard shell) as suggested by the admitted prior art for heat insulation.

Regarding claim 6, one of ordinary skill in the art at the time the invention was made reading Rutsch et al. in view of the admitted prior art would have readily appreciated incorporating into the method taught by Rutsch et al. transverse cross pieces as suggested by the admitted prior art for side impact protection.

18. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rutsch et al. as applied in above in paragraph 14, and further in view of WO 94/09982.

Rutsch et al. teach all of the limitations in claim 7 as applied above except for a teaching on using recycled foam cores. However, it is well known in the art to use recycled foam cores to

reduce cost as shown by WO 94/09982. One of ordinary skill in the art at the time the invention was made reading Rutsch et al. in view of WO 94/09982 would have readily appreciated incorporating into the method taught by Rutsch et al. recycled foam cores as suggested by WO 94/09982 to reduce the cost of producing the foamed composites.

WO 94/09982 is directed to a plastic foam molded body. WO 94/09982 teaches using an inner core of recycled foam encapsulated within an outer covering of fresh foam (See abstract).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pritchard et al. (U.S. Patent 5,837,172) directed to a method for forming fiber reinforced automobile trim products.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

John L. Goff
October 1, 2002

Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700